

DATAFLYER

XDS

Expansion
Drive System

USERS
IDE HARDWARE MANUAL

EXPANSION
SYSTEMS

INTRODUCTION

Congratulations on your purchase of the DataFlyer XDS hard drive. This manual covers the installation of the IDE hard drive into the XDS chassis and the Data/Power cable into the A600/1200 computer.

CONFIGURATION

POWER

The DataFlyer XDS can be powered from the Amiga or from an external source via the 5 pin DIN connector located on the rear of the chassis base. As most of the new low profile (one inch high) drives are very low power and it is suggested the XDS be powered from the Amiga. External power should be considered only when there appears to be a problem with the drive spinning up when the computer is turned on. This will depend on the type of drive being used and the number of other items (like additional memory boards etc.) requiring power from the Amiga power supply. If more power is required a larger power supply for the Amiga or an external power supply can be added. See the section External Power in this manual.

POWER JUMPERS

Remove the chassis cover from the chassis base and locate the power configuration jumper blocks on the printed circuit board at the rear of the chassis base (see Diagram A and B). The jumper blocks are black plastic and can be lifted with the fingers or a pair of plyers and replaced in the new position. Place the jumper blocks in the position that reflects the type of power needed as shown below.

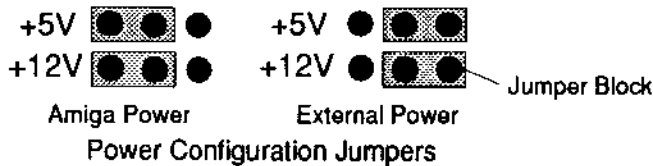


Diagram A

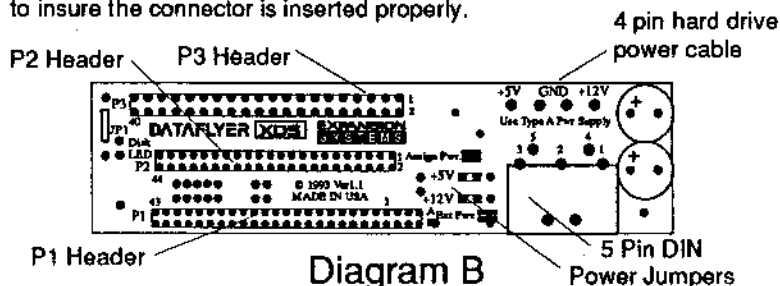
SLAVE AND MASTER JUMPERS

Each IDE or AT type of drive must be designated as a single, master or a slave. If this is the only drive that will be used then it must be the single drive. If it is the second drive then you have a choice between the two on which one will be the master or the slave. Find and set the jumpers similar to the power configuration jumpers on your drive that determines this status. A 2mm Jumper block is provided to set the internal 2.5 Inch drive to Master/Slave. There are three modes for IDE and their setting are shown in the chart below.

Modes	Drives
SINGLE	ONE
MASTER SLAVE	TWO

INSTALLING THE HARD DRIVE

Locate the chassis base, the hard drive and the four 6X32 phillips flat head mounting screws. Place the drive in the chassis with the connector end facing the printed circuit board at the rear of the chassis. **DO NOT MOUNT THE DRIVE AT THIS TIME.** Attach the 40 pin ribbon cable from connector P3 to the rear of the drive. Check that pin one or the RED lead on the ribbon cable matches with pin one on the hard drive. Locate the four pin power cable and insert it into the power connector on the hard drive. This connector is shaped like the letter "D" to insure the connector is inserted properly.



After the two cables are connected mount the drive to the chassis using the four 6X32 screws provided. **DO NOT OVER TIGHTEN.** See Diagram C.

INSTALLING THE CHASSIS COVER

Slide the chassis cover over the chassis base so the four mounting holes on the bottom match. The cover should be flush with the front and rear ends of the base. Using the four 4X32 phillips flat head screws provided attach the cover.

INSTALLING THE DATA/POWER CABLE

The Data/Power cable is installed inside the computer. Turn the computer over and remove the screws that hold the cover in place. Turn the computer back over and remove the shield that covers the mother board. **BE VERY CAREFUL AS THE EDGES OF THE SHIELD ARE SHARP.**

Locate the IDE hard drive header CN16 as shown in Diagram F. Place the black 44 pin connector over the header making sure that the RED lead is located toward the front of the computer. If there is an internal 2.5 inch drive attach the second 44 pin connector the that drive.

Locate connector CN12 on the mother board. This is the floppy drive power cable. Remove this cable and replace it with the two connectors on the Data/Power cable. Connect the cable even though you may be using external power. If this changes it will eliminate the need to open the computer again. The power will not be used if the power configuration jumpers are set for external.

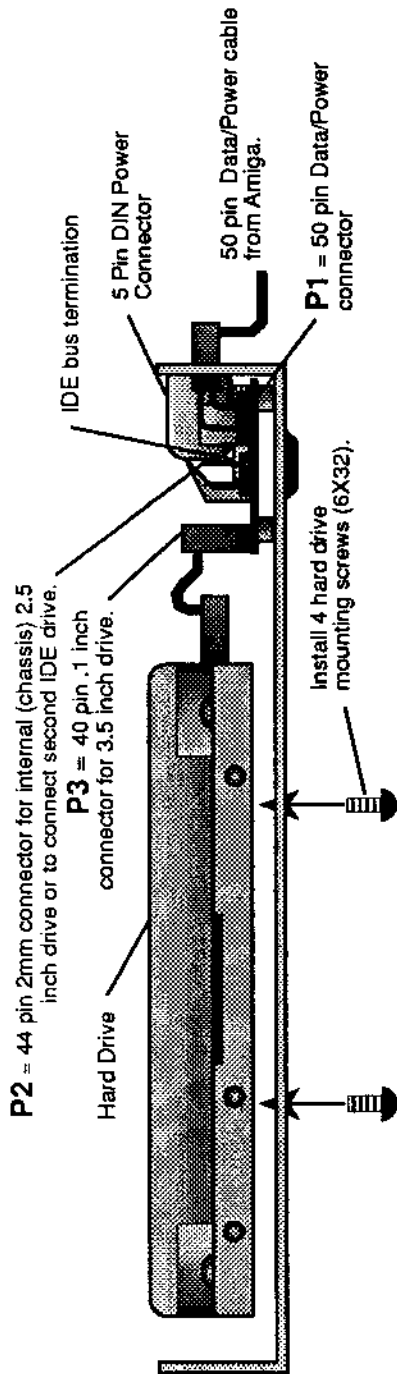
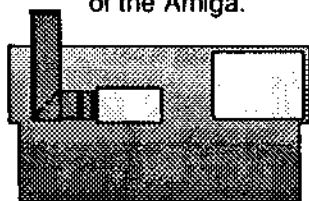


Diagram C

Data/Power cable exits out the rear of the Amiga.



Data/Power cable exits out the PCMCIA slot of the Amiga.

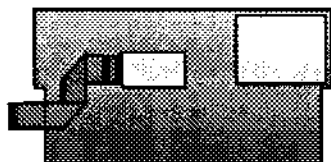


Diagram D

The 50 pin ribbon cable can exit the case through the PCMCIA by folding the connector over and gently pushing it through the PCMCIA slot. Fold the external ribbon cable over at a 45 degree angle so the cable enters the rear of the XDS chassis correctly and sits next to the Amiga.

Another exit is via the rear over the edge of the computer's base. This provides a rear exit keeping the cable out of the way. It is also better if the XDS drive is going to be placed on a shelf above the computer. Placing the thin ribbon cable flat along the rear edge it will allow the shield and cover to be replaced without any problems. No modification of the case is necessary. See Diagram D.

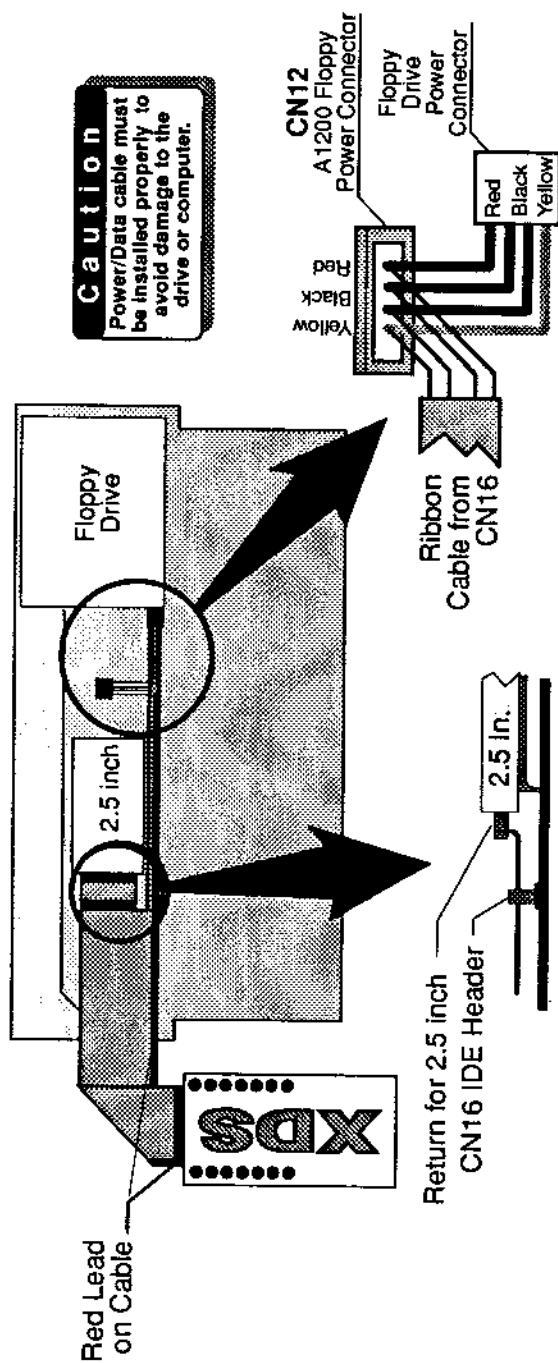
Attaching Drive to Data/Power Cable

The Data/Power cable attaches to the rear of the DataFlyer XDS chassis as shown in Diagram E. It is important that this cable is installed correctly. Orient the 50 pin connector so the RED lead is on the right looking at the rear of the chassis. The 50 pin connector has a pin that is blocked that will prevent the connector from being plugged incorrectly onto the header on the rear of the chassis. IF THE CONNECTOR DOES NOT FIT DO NOT FORCE IT or damage may result.

Pin 1



Diagram E



Data/Power Cable Installation
Diagram F

EXTERNAL POWER

If external power is required then ask for the DataFlyer XDS external power supply. It is specially designed to power one 3.5 inch hard drive. If you have a power supply and wish to use it for power it will need a 5 pin DIN connector wired to match the connector on the back of the XDS chassis. See Diagram E below for the pin outs looking directly at the female socket on the back of the XDS chassis.



Diagram G

Chassis exit from P2 for
44 pin ribbon cable
(optional) to second 3.5
inch IDE drive.

5 pin DIN external
power connector.

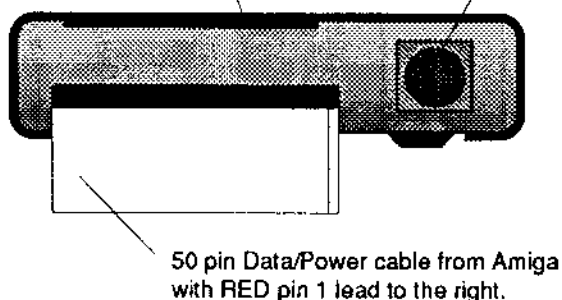


Diagram H

FORMATTING THE HARD DRIVE

For formatting the drive and installing the programs please refer to the DataFlyer Installation software manual and disk..



CONNECTOR INFORMATION

IDE

Below are listed the pin assignments for the 40 pin connector on the rear of the drive. Pin number 20 is cut off for prevention of incorrect connector insertion.

IDE Pin Numbers

Signal	Pin Num.	Signal	Pin Num.
-RESET	01	RSVD	21
GND	02	Ground	22
+DATA 7	03	-IOW	23
+DATA 8	04	Ground	24
+DATA 6	05	-IOR	25
+DATA 9	06	Ground	26
+DATA 5	07	+IOCHRDY	27
+DATA 10	08	+ALE	28
+DATA 4	09	RSVD	29
+DATA 11	10	Ground	30
+DATA 3	11	+IRQ14	31
+DATA 12	12	-IOCS16	32
+DATA 2	13	+ADR1	33
+DATA 13	14	-PDIAG	34
+DATA 1	15	+ADR0	35
+DATA 14	16	+ADR2	36
+DATA 0	17	-CS0	37
+DATA 15	18	-CS1	38
Ground	19	-SLV/-ACT	39
KEY	20	Ground	40

Additional pins on 2.5 inch hard drives

+5V	41
+5V	42
Ground	43
Open	44

50 PIN DATA/POWER CABLE

The Data/Power cable carries all the 44 pins listed above and 6 additional pins that are assigned as follows:

2 = +5V

2 = +12V

2 = Ground

LIMITED WARRANTY

Expansion Systems, warrants the DataFlyer XDS interface and chassis against defects for a period of one year from the date of original (retail) purchase. Expansion Systems will repair or (at its option) replace this product during the warranty period provided the product has not been damaged by accident, abuse or misuse.

Hard disk drives will be covered with a separate warranty provided with the hard drive.

The foregoing constitutes the sole warranty of Expansion Systems and all warranties of merchantability and fitness are hereby excluded to the extent permissible by law; or if such exclusion is prohibited by any federal, state, or municipal law which cannot be preempted, are hereby limited to ONE YEAR from original retail purchase of this product. Incidental or consequential damages resulting from a breach of any applicable express or implied warranties are hereby excluded.

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